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September 13, 2011

Mr. Lee Hamilton and Mr. Brent Scowcroft Blue Ribbon Commission Co-Chairs U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

The Honorable Messrs. Hamilton and Scowcroft:

As the Blue Ribbon Commission comes to the end of its second full year of investigation into the issues surrounding disposal and final disposition of high-level radioactive waste, the Alliance for Nuclear Responsibility again¹ encourages the panel to actively consider holding one of their next meetings in the state of California. While we support the newfound regulatory acknowledgment of increased seismic hazards in many of our nation's other nuclear-powered states, the fact remains that California has *the* most active seismic footprint of any nuclear reactor host state. This provides a unique setting in which to consider the near and long term hazards posed by radioactive waste. Indeed, it was one of the BRC's own consulting panelists, Dr. Per F. Peterson of U.C. Berkeley, who first brought this to light in his email of November 25, 2010, in which he wrote:

...the issues for removal and disposition of spent fuel from California do involve challenges, which must be considered in the development of national policy for the management of spent fuel and high level waste..."²

In light of the Nuclear Regulatory Commission's recent revisions to the Waste Confidence Decision, and their ongoing policy of reactor license renewals, we may be seeing high-level waste accumulating across our nation well into the next century—a period of time during which both the reactors and waste storage infrastructure will continue to age. During this same period, the odds of a major earthquake in California will also increase, as noted in a recently released email by the NRC's chief of Nuclear Regulatory Research, Brian Sheron, who wrote on March

¹ January 7, 2011 Letter from Alliance for Nuclear Responsibility to BRC

² November 25, 2010; email from Per F. Peterson to Rochelle Becker

14, 2011, "And isn't there a prediction that the West Coast is likely to get hit with some huge earthquake in the next 30 years or so? Yet we relicense their plants."³

On-site radioactive waste storage—whether during plant operation or post-operation—continues to be subject to forces of nature we have not yet learned to predict. Six months after the Japanese tragedy at Fukushima, many technical lessons are still being learned, but the philosophical lesson, "failure to imagine the unimagineable" has been echoed widely. Notwithstanding damage done to the core of the reactors at Fukushima by quake and subsequent tsunami, the vulnerabilities of the spent fuel pools were visibly noted and documented, including the accumulation of explosive gases and the failure or lack of monitoring equipment to maintain accurate control on the ambient environment surround the pools. As long as high level waste remains in spent fuel pools at California's seismically active locations, these remain our concerns. And yet, in the BRC's intial 2011 report there was no mention of such seismic concerns, and only a cursory section referencing Fukushima in the more recent BRC update.

There are several key factors why these omissions trouble California ratepayers and utility customers; issues unique to California:

- 1. The San Onofre Nuclear Generating Station (SONGS) is surrounded by a population of over 18 million residents within a 50 mile radius, second only to the Indian Point facility north of New York City. When considering the 50 mile evacuation zone recommended by the NRC for the Fukushima disaster—necessitated in part by damage to the spent fuel pools (waste)—the sheer demographics of this California location make SONGS a case meriting special attention.
- 2. Pacific Gas & Electric, owners of the Diablo Canyon facility, have replied to the California Energy Commission via Data Requests that they intend to leave any spent fuel created during a license extension in the pools, and that they have no plans to expedite the transfer of existing spent fuel from the pools to dry cask storage. The recent admission that dry storage casks at the North Anna reactors moved up to four inches during a below-design-basis earthquake, combined with the extended timelines of the NRC's Waste Confidence Decision, make seismically vulnerable California a region meriting special attention.
- 3. In a report issued after the Fukushima event, the California Coastal Commission noted that the current ISFSI at the decommissioned Humboldt Bay reactor was more seismically vulnerable than their permitting requirements allow, writing:

...the Commission cannot conclude that the site will be safe from tsunami hazards either during the relatively short-term or in perpetuity. First, similarities between the expected Cascadian

³ Cappiello, Dina and Donn, Jeff, "Quakes pose greater risk to US reactors" Associated Press Posted: 09/01/2011

⁴ Nuclear Regulatory Commission based on 2000 U.S. Census, US NRC Office of Public Affairs ⁵ California Energy Commission Docket 11-IEP-1J, Nuclear Data Request in the 2011 Integrated Energy Policy Report, June 9, 2011

Subduction Zone earthquakes and the December 2004 Sumatran earthquake raise doubts as to the validity of the expected tsunami runup height at the ISFSI site. Although the Commission found the project was inconsistent with Coastal Act section 30253 for this and other reasons, as well as other Chapter 3 policies of the Coastal Act, it approved the ISFSI, in large part due to the lack of safer alternative storage sites for the material and the hazards of transporting the material offsite.⁶

The isues at Humboldt reinforce the need for special seismic consideration of waste in California.

At what price can seismicity ignored? California has a responsibility—and a judicially guaranteed right—to protect its economy and the reliability of its energy generation capacity.⁷ This state recommended advanced seismic studies be completed at Diablo Canyon and San Onofre as part of a cost/risk/benefit analysis *three years before* Fukushima. The utilities delayed implimentation until the tradedy at Fukushima made it publically and politically untenable to ignore them any longer. Absent from the BRC's post-Fukushaima update was analysis of the economic lessons learned. The damage and liability claims in only the first three months after Fukushima have already exceeded the limits of the Price-Anderson Act.⁸

Acting on these concerns—before Fukushima—California Congresswoman Lois Capps sent the BRC a letter on January 11, 2011 requesting that the BRC hold a meeting in California. On February 25, 2011, San Luis Obispo's Senator Sam Blakeslee, joined by five Senators and four Assembly Members representing reactor and waste site communities sent a similar request to the BRC. These letters made it clear that a wealth of seismic knowledge from California's experts could be made available to the BRC. To date, these elected officials have received in return only an acknowledgment that their letters were received at the BRC. There as been no substantive communication.

The BRC understands that California's reactor locations would never be chosen—nor meet the criteria—as sites for permanent disposal of highly radioactive waste. And yet, by hiding behind the indefinite definition of "temporary" storage, our federal agencies continue to play semantic games with a very real threat. Should California allow 20 more years of radioactive waste production, and then wait another sixty years for the federal government's promises to be fulfilled? Our state's legislators and regulators deserve answers to these questions on behalf of their constituents. They have offered to provide some of the best regional technical expertise on these issues. We, citizens and residents, certainly deserve the opportunity to look into your eyes and listen as you explain why any plan for the long term storage of radioactive waste is economically tenable in our fiscally burdened state.

⁶ California Coastal Commission, "The Tohoku Earthquake of March 11, 2011: A preliminary Report on Implications for Coastal California," March 24, 2011, p 12.

⁷ PACIFIC GAS & ELEC. v. ENERGY RESOURCES COMM'N, 461 U.S. 190 (1983)

⁸ Slodkowski, Antoni, "Tepco may face \$23.6 billion compensation costs: JP Morgan," Reuters, April 11, 2011.

While a meeting in Denver may seem "close enough" to California it is many seismic zones away. There may be many possible solutions being discussed with Western Governors, but Japan has proven California does not have the luxury of delaying solutions or making irresponsible economic investments to create more waste.

The Alliance for Nuclear Responsibility listed the advantages of holding a BRC meeting in California in our letter of January 7, 2011 yet our invitation and the invitiation of our representatives has gone unanswered. You ask for our trust and you claim transparency, but California—the most populous state in the nation—has seen little action on behalf of our federal government. Beyond safety and science, there are economic ramifications to the long-term radioactive waste storage dilemma. California has a jurisdictional right to intervene, and its internal regulatory agencies are working together where possible. We believe it would benefit both the BRC and our state to work in collaboration to address California's unique storage issues.

We look forward to the courtesy of your reply.

Respectfully submitted,

Rochelle Becker Executive Director